

## Tennessee Pollution Prevention Partnership Success Story



**ETSU Little Buccaneers  
Student Child Care Center**  
P.O. Box 70434  
Johnson City, TN 37614  
Micky Morton  
(423) 439-7549



## Turn Out The Lights Program

### The Member

Little Bucs is a non-profit child care center with approximately 85 children of ETSU students. The center provides care to children ages 3 months to 5 years with an additional pre-k grant room. In spring 2008, the students and staff of Little Bucs adopted the following environmental mission statement: "Little Buccaneers is committed to the awareness of our impact on the world around us and an understanding of how we can make a positive difference through our knowledge of environmental stewardship."

### The Story

Little Buccaneers is seeking to instill awareness within their children by introducing Environmental Education that engages them about the importance of taking care of their planet. A reduction in energy consumption is a huge component of our environmental mission statement. To help reduce energy use, the teachers educate the children every day on the importance of turning off the lights when they leave the room. We have adopted the program "Turn Out The Lights!" Under each light switch within our center, we have placed a sticker that reminds everyone to turn off the lights. The children practice this habit forming behavior in the bathrooms and in their own classrooms. We hope they continue this at home and share what they have learned to teach others.

Along with this program, we also turn out the center's hallway lights during nap time to reduce the energy consumed. Little Buccaneers has replaced every burnt out incandescent bulb for our alternative lighting within the center with a compact florescent bulb. The incandescent bulbs used 60 watts, compared to the CFLs that use 15 watts. CFL bulbs use 75 % less energy and last 10 times longer than an incandescent bulb. Part of the philosophy of the center is to create a homelike setting where each classroom uses alternative lighting through lamps, allowing us to keep the overhead lights turned off.

ETSU as an institution houses a coal incinerator, steam plant, and also purchases power from TVA. Throughout the

year, power is drawn from whichever source is more economical. Since coal is one of Tennessee's greatest sources of pollution, small amounts of energy conservation results in the prevention of pollution.

As recent building updates throughout ETSU have concentrated on energy conservation, Little Bucs was provided many new installations for reducing energy in the fall of 2007. All of our overhead fluorescent bulbs were replaced with low wattage full spectrum five year bulbs and ballasts. Our building was also put on an energy management system, which means scheduled system shut downs occur to save energy during unoccupied periods. A HVAC upgrade is scheduled for 2010 to increase efficiency.

### The Success

Little Bucs is on the same meter as the rest of the University, so the data pertaining to energy consumption before or after the upgrades were extracted by mathematical formulas. We know the light bulb replacements have made a significant difference in our carbon footprint. We observe children every day turning the lights off on their own; in fact as I am writing this, I just heard the click of the switch in the bathroom!

### The Pollution Prevented

We replaced 44 light bulbs with CFLs, providing a savings of 5,016 kilowatt- hours of electricity over a one year span. By replacing the incandescent bulbs with the CFLs, the center is preventing the release of 3.6 metric tons of CO<sub>2</sub> into the atmosphere per year. For two hours per day, over a one year span every light in the center was turned off, saving 3,662 kilowatt- hours of electricity and 2.6 metric tons of CO<sub>2</sub>. The children are helping become part of the solution. By learning now to conserve energy, their future will be that much brighter.

June 2009